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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,573	07/13/2001	John Aram Safa	SWIN 2275	2842

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EXAMINER

HENNING, MATTHEW T

ART UNIT PAPER NUMBER

2131

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/905,573

Applicant(s)

SAFA, JOHN ARAM

Examiner

Matthew T. Henning

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. This action is in response to the communication filed on 4/4/2005

**DETAILED ACTION**

2. Claims 1-9, and 11-26 have been examined and claim 10 has been cancelled.
3. All objections and rejections not set forth below have been withdrawn.

*Title*

4. The title of the invention as amended is acceptable.

*Priority*

5. The application has been filed under Title 35 U.S.C §119, claiming priority to United Kingdom Application number 0017478.9, filed July 18, 2000.
6. The effective filing date for the subject matter defined in the pending claims in this application is July 18, 2000.

*Information Disclosure Statement*

7. The information disclosure statements (IDS) submitted on 10/15/2001 and 11/06/2002 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statements.

*Drawings*

8. The drawings filed on 07/13/2001 are acceptable for examination proceedings.

*Specification*

9. The specification is objected to for failing to provide proper headings for each section. See MPEP § 608.01(a).
10. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the

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following is required: The specification fails to provide antecedent basis for the limitation of claim 20 that the executable application, when loaded, "comprising a program which requires access to at least one sub-routine during examination". See the rejection of claim 20 under 35 USC 112 1<sup>st</sup> paragraph below.

*Claim Rejections - 35 USC § 112*

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 12-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation, of claim 20, that the executable application, when loaded, "comprising a program which requires access to at least one sub-routine during examination" is not described in the specification. It is described that the program requires access to sub-routines during execution, but there is no mention of the program being examined, let alone requiring access to a sub-routine while the program is being examined. Therefore, claim 20 fails to meet the written description requirement set forth by 35 USC 112 1<sup>st</sup> paragraph. Claims 13-20 are rejected by virtue of their dependency to claim 20.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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14. Claims 13-16 and 18-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

15. Claim 13-16 and 18-19 recite the limitation "the executable program". There is insufficient antecedent basis for this limitation in the claim. It is not clear whether this limitation is referring to the "executable application" or the "program" contained within the executable application. Therefore, one of ordinary skill in the art would be unable to determine the scope of the claims. Therefore, claims 13-16 and 18-19 fail to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

17. Claims 1, 3-6, 9, 11-17, 20-21, 23-24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Altberg et al. (6,353,928) hereinafter referred to as Altberg, and further in view of Glover (US Patent Number 6,052,780).

18. Regarding claims 1, Altberg disclosed a computer readable medium, having an executable application recorded thereon, wherein the application, when loaded, includes a program which requires access to at least one sub-routine during execution (See Altberg

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Abstract), and the application further includes, when loaded, the or each of the sub-routines in encrypted form (See Altberg Col. 7 Lines 16-25), and a decryption routine operable to convert the encrypted sub-routines to an executable form, at least when access is required by the program (See Altberg Col. 7 Lines 16-25, Claim 8 and Fig. 3). (Also see Col. 5 Lines 13-16), but failed to disclose that the decryption routine and encrypted subroutines were part of the application.

Glover teaches that in order to protect applications from being copied, certain parts of the application should be encrypted and should be decrypted by a portion of the application upon user authentication (See Glover Col. 3 Paragraph 3 and Col. 10 Paragraph 3).

It would have been obvious to the ordinary person skilled in the art at the time of invention to employ the teachings of Glover in application of Altberg by including a decryption program and the encrypted portions of the program in the application, and decrypting the required portions for use by the program during the first execution of the program and upon user authentication. This would have been obvious because the ordinary person skilled in the art would have been motivated to secure the application against pirating in a manner which does not require either a hardware or platform manufacturer or a content consumer to provide support for the specific form of corresponding decryption.

19. Regarding claim 3, the combination of Altberg and Glover disclosed that the application, when loaded, includes an address table and the decryption routine makes an entry in the address table to identify the location of a recreated sub-routine, the address table being accessible by the program for locating sub-routines for access when required (See Altberg Col. 5 Paragraph 3 wherein Altberg states that the files are placed in predetermined locations, all known by the application, the shared library DLL and the installer module, and therefore it was inherent that

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the location of the required files was placed in an address table in order for the locations to have been known). (Also see Glover Col. 9 Lines 47-53.)

20. Regarding claim 4, the combination of Altberg and Glover disclosed that the decryption routine is operable to detect the presence of a sub-routine already available within a system running the application, and to cause the executable program to use a sub-routine if already available (See Altberg Col. 7 Paragraphs 3-4).

21. Regarding claim 5, the combination of Altberg and Glover disclosed that the application, when loaded, includes an address table and the decryption routine is operable to incorporate within the address table an address for a sub-routine already available, the address table being accessible by the program for locating sub-routines for access when required, whereby decryption of a further copy of the sub-routine is not required (See Altberg Col. 7 Lines 16-35 and Col. 5 Paragraphs 3-4).

22. Regarding claim 6, the combination of Altberg and Glover disclosed that the decryption routine is operable to discriminate between different versions of a sub-routine, whereby to convert an encrypted version in the event that only a different version is available within the system (See Altberg Col. 3 Lines 37-44).

23. Regarding claim 9, the combination of Altberg and Glover disclosed that encryption and decryption include or consist of compression or decompression techniques (See Altberg Col. 7 Paragraph 3).

24. Regarding claim 11, the combination of Altberg and Glover disclosed a computer system comprising processing means operable to execute software, and further comprising a computer readable medium according to claim 1 (See the rejection of claim 1 above), wherein the

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processing means is operable under control of said executable application when said executable application is loaded, to execute said program and to convert said encrypted sub-routines to an executable form, at least when access is required to the program, during execution (See Altberg claims 19-21 and the rejection of claim 1 above).

25. Regarding claim 12, the combination of Altberg and Glover disclosed a computer system operable to execute an executable application, the system including: first store means containing computer readable code representing the executable application (See Altberg Fig. 1 Elements 27 and 36); loading means operable to load the code for execution (See Altberg Fig. 1 Elements 22 and 36 wherein it was inherent that the code was loaded into RAM); the executable application, when loaded, comprising a program which requires access to at least one sub-routine during examination, and the executable application further comprising, when loaded, the or each sub-routine in encrypted form, and the executable application further comprising, when loaded, second loading means operable to convert the encrypted sub-routine to an executable form (See the rejection of claim 1 above), and the executable application further comprising, when loaded; identifying means operable to identify any sub-routines required by the executable program during execution thereof (See Altberg Fig. 3 Step 310 wherein it was inherent that the required files were identified prior to verifying their existence); the system further including: second store means containing computer readable code representing the or each sub-routine identified by the identifying means (See Altberg Fig. 2 Element 220 File 1 – File N); and the second loading means being operable to load from the second store means the or each sub-routine in the event that the sub-routine is not available elsewhere within the system (See Altberg Fig. 3 Step 320).



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26. Regarding claim 13, the combination of Altberg and Glover disclosed that the identifying means and second loading means are operated on each occasion that execution of the executable program is initiated, whereby to make the sub-routines available on each occasion (See Altberg Fig. 3 and Col. 6 Line 50 – Col. 7 Line 54).

27. Claim 14 is rejected for the same reasons as claim 3 above.

28. Claim 15 is rejected for the same reasons as claim 4 above.

29. Claim 16 is rejected for the same reasons as claim 5 above.

30. Claim 17 is rejected for the same reasons as claim 6 above.

31. Claim 20 is rejected for the same reasons as claim 9 above.

32. Regarding claim 21, the combination of Altberg and Glover disclosed a method of installing a piece of computer software, comprising: providing an executable application which includes, when loaded, a program and, in encrypted form, at least one sub-routine to which the program requires access during execution, and the application further comprising, when loaded, a decryption routine operable to convert the encrypted sub-routine to an executable form, installing the executable application (See Altberg Abstract); commencing execution of said program (See Glover Col. 10 Paragraph 1-3); operating the decryption routine to decrypt the encrypted copy of the sub-routine (See Glover Col. 10 Paragraphs 1-3); and installing the decrypted copy for access by said program (See Glover Col. 10 Paragraphs 1-3).

33. Regarding claim 23, the combination of Altberg and Glover disclosed that the method further comprises the step of identifying any sub-routines already installed and available to the program, and wherein the steps of decrypting and installing only the or any required sub-routine which is not so available (See Altberg Fig. 3).

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34. Claim 24 is rejected for the same reasons as claim 6 above.

35. Claim 26 is rejected for the same reasons as claim 9 above.

36. Claims 2 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Altberg and Glover as applied to claims 1 and 21 above, and further in view of Glover.

The combination of Altberg and Glover disclosed checking for the required files each time the application was run (See Altberg Fig. 3 and related specification), but the combination of Altberg and Glover failed to disclose recreating the required files each time the application was run.

Glover further teaches that to further protect applications from being copied, certain parts of the application should be encrypted and each time the software is run the parts should be decrypted and further destroyed when the application terminates (See Glover Col. 3 Paragraph 3 and Col. 10 Paragraph 3).

It would have been obvious to the ordinary person skilled in the art at the time of invention to employ the teachings of Glover in the installation program of Altberg and Glover by deleting the required files after the application completed and recreating them when the application was executed. This would have been obvious because the ordinary person skilled in the art would have been motivated to secure the application against pirating.

37. Claims 7-8, 18-19, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Altberg and Glover as applied to claims 1, 12, and 21 above, and further in view of Shen (US Patent Number 6,611,850).

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The combination of Altberg and Glover teaches a providing a copy of the application (See Rejection of claim 12 above) but failed to disclose providing an encrypted backup copy of the application to be decrypted and installed in the event that the original application was missing or determined to be corrupt.

Shen teaches a method for protecting files by providing a backup encrypted copy of the file which is decrypted in the event that that original file is missing or corrupt (See Shen Col. 3 Lines 5-24).

It would have been obvious to the ordinary person skilled in the art at the time of invention to employ the teachings of Shen in the installation system of Altberg by creating an encrypted backup file of the application and using the backup to restore the application in the event that the file was found to be missing or corrupt. This would have been obvious because the ordinary person skilled in the art would have been motivated to provide protection against accidental deletion of the application, malfunction, or infection by a computer virus.

#### ***Response to Arguments***

38. The examiner would like to note that applicant has incorrectly referred to claims 10 and 11 as independent claims. In fact, claim 10 has been cancelled and claim 11 is dependent from claim 1.

39. Further, the examiner notes that the applicant failed to address either the combination of Altberg and Glover, or the combination of Altberg and Shen.

40. Applicant's arguments with respect to claims 1, 12, and 21 have been considered but are moot in view of the new ground(s) of rejection.

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41. Further, the examiner would like to point out that the applicant's argument that Altberg provided two separate modules instead of three components has not been found persuasive.

There is no requirement in the claims that the three components be contiguous in memory.

Further, Altberg did disclose all three components as recited in Col. 5 Lines 13-16.

### *Conclusion*

42. Claims 1-9, and 11-26 have been rejected.

43. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a. Cina, Jr. (US Patent Number 4,930,073) disclosed a method for checking the version of a stored program in order to prevent the use of an incorrect version.

b. Hammond (US Patent Number 5,974,470) disclosed a system for managing different versions of DLLs.

44. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew T. Henning whose telephone number is (571) 272-3790.


The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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